

FIG. 1

FIG. 2. Illustration of Select Records of a Dataset

| | |
|-----------|---|
| Record 1 | * |
| Record 2 | * |
| Record 3 | |
| Record 4 | |
| Record 5 | * |
| Record 6 | * |
| Record 7 | * |
| Record 8 | |
| Record 9 | * |
| Record 10 | |
| Record 11 | |
| Record 12 | |
| Record 13 | * |
| Record 14 | * |
| Record 15 | |

FIG. 3. Table of Raw Data

| Purchase Order No. | Vendor | Division | Color | Buyer |
|--------------------|--------|----------|-------|-------|
| 1 | A | 300 | white | 64 |
| 2 | B | 200 | blue | 26 |
| 3 | B | 100 | blue | 20 |
| 4 | C | 100 | white | 21 |
| 5 | C | 300 | blue | 33 |
| 6 | B | 300 | blue | 10 |
| 7 | B | 200 | blue | 45 |
| 8 | A | 100 | white | 38 |
| 9 | C | 300 | blue | 98 |
| 10 | B | 200 | white | 56 |
| 11 | A | 300 | white | 23 |
| 12 | C | 100 | blue | 51 |
| 13 | A | 200 | blue | 19 |
| 14 | A | 200 | white | 46 |
| 15 | B | 300 | blue | 88 |
| 16 | C | 100 | white | 27 |
| 17 | C | 300 | blue | 15 |
| 18 | B | 300 | blue | 93 |
| 19 | B | 200 | white | 60 |
| 20 | B | 100 | white | 72 |
| 21 | A | 200 | white | 57 |
| 22 | C | 100 | blue | 35 |

FIG. 4. Table of FIG. 3 As Sorted

| Purchase Order No. | Vendor | Division | Color | Buyer |
|--------------------|--------|----------|-------|-------|
| 12 | C | 100 | blue | 51 |
| 3 | B | 100 | blue | 20 |
| 22 | C | 100 | blue | 35 |
| 4 | C | 100 | white | 21 |
| 16 | C | 100 | white | 27 |
| 20 | B | 100 | white | 72 |
| 8 | A | 100 | white | 38 |
| 13 | A | 200 | blue | 19 |
| 2 | B | 200 | blue | 26 |
| 7 | B | 200 | blue | 45 |
| 19 | B | 200 | white | 60 |
| 14 | A | 200 | white | 46 |
| 21 | A | 200 | white | 57 |
| 10 | B | 200 | white | 56 |
| 9 | C | 300 | blue | 98 |
| 18 | B | 300 | blue | 93 |
| 5 | C | 300 | blue | 33 |
| 6 | B | 300 | blue | 10 |
| 17 | C | 300 | blue | 15 |
| 15 | B | 300 | blue | 88 |
| 1 | A | 300 | white | 64 |
| 11 | A | 300 | white | 23 |

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FIG. 5. Table of FIG. 4 As Rolled Up

| Vendor | Division | Color | Quantity |
|--------|----------|-------|----------|
| C | 100 | blue | 3 |
| C | 100 | white | 4 |
| A | 200 | blue | 3 |
| B | 200 | white | 4 |
| C | 300 | blue | 6 |
| A | 300 | white | 2 |

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FIG 6. Fields of an Exemplary Aspect Containing Blocked Invoices

| <u>Field Name</u> | <u>Brief Description</u> | <u>Data Type</u> | <u>SAP Field Name</u> | <u>Source</u> |
|-------------------|--------------------------|------------------|-----------------------|---------------|
| MANDT | Client | CLNT 003 | MANDT | T000 |
| RECTY | Record type | CHAR 001 | CFRECTY | |
| VERSO | Version | NUMC 002 | CFVERSO | T242V |
| YEARB | Fiscal year | NUMC 004 | CFYEARB | |
| PERDE | Period | NUMC 003 | CFPERDE | |
| COMCOD | Company code | CHAR 004 | BUKRS | T001 |
| ZCOMM | Commodity | CHAR 009 | ZCOMM | ZEISC |
| ZMAJR | Major Requestor | CHAR 002 | ZMAJR | |
| DYSRF | Number of Days | CHAR 003 | RKCG_DYSRF | T271H |
| KNTTP | Acct.assgt.cat. | CHAR 001 | KNTTP | T163K |
| ASAP | asap indicator | CHAR 001 | RKCG_ASAP | T2719 |
| ZORIG | Origin | CHAR 003 | ZORIG | |
| ZVEND | Vendor | CHAR 017 | ZVEND | ZEISV |
| ZVNAM | Vendor name | CHAR 032 | ZVNAM | |
| VALTY | Value type | CHAR 001 | CFVALTY | T242W |
| RECNR | Record number | NUMC 008 | CFRECNR | |
| AEDTM | Changed on | DATS 008 | CFAEDTM | |
| UNAME | User name | CHAR 012 | CFUNAME | |
| PINTR | Reference | NUMC 008 | CFPINTR | |
| SUPSG | supplier segment | CHAR 004 | RKCG_SUPSG | T2715 |
| ITMAC | quantity item accts | QUAN 008 | RKCG_ITMAC | |
| ITMAC_UNIT | Unit | UNIT 003 | RKCG_UNIT | T006 |
| ZTDYS | total days | QUAN 008 | RKCG_ZTDYS | |
| ZTDYS_UNIT | Unit | UNIT 003 | RKCG_UNIT | T006 |

FIG. 7. Detailed Description of the Fields of FIG. 6

| <u>Field Name</u> | <u>Detailed Description</u> |
|-------------------|--|
| MANDT | Client - IBM SAP Instance Number - field automatically populated through EIS; source system leaves blank |
| RECTY | Record type - Assigned by EIS, source system leaves blank; all of our EIS applications insert '0' into this field indicating the record contains numerous data values (as opposed to '1' saying this is a text description record) |
| VERSO | Version - 01 or 02, records coming from source contain '01' |
| YEARB | Fiscal year - Year from the end date off the control card used to strip the data from the source |
| PERDE | Period - Month from the end date on the control card |
| COMCOD | Company code - Number assigned to identify different IBM locations (ie. '0147' represents US) |
| ZCOMM | Commodity - Also known as Material Group id; the commodity code from the source system (commodity codes are a standard set of codes representing the different materials being handled) |
| ZMAJR | Major Requestor - aka division code; uniquely identifies the individual IBM business unit (ie. 07 represents Global Services, 42 is Micro Electronics) |
| DYSRF | Number of Days - number of days the invoice has been blocked (in referral); carried as characteristic for EIS (in CHAR format) |
| KNTTP | Acct.assgt. cat. - aka resale flag; indicates whether the material is internal or resale |
| ASAP | asap indicator - aka buyerless flag; indicates the purchase order (material) has not been handled by a buyer but has entered the system through an automated process |
| ZORIG | Origin - Location of where the data has come from (ie. from BDW would be 001, from SAP US would be 003) |
| ZVEND | Vendor - Vendor id, number uniquely identifying the vendor to IBM |
| ZVNAM | Vendor name - the vendor name associated with the vendor number |
| VALTY | Value type - assigned by EIS source systems pass in as a constant; values represented: 0=actual data, 1=planning data, 2=target data |
| RECNR | Record number - EIS assigned; used internally by the EIS system |
| AEDTM | Changed on - EIS populated; last date the record was touched |
| UNAME | User name - EIS populated with the last user touching the record |
| PINTR | Reference - EIS assigned and used internally to the EIS system |
| SUPSG | Supplier segment - IBM standard code for purchasing organization |
| ITMAC | quantity item accts - number of item accounts on this invoice |
| ITMAC_UNIT | Unit - Unit of measure for the item account (ie. piece, carton) |
| ZTDYS | total days - key figure, used for queries and reporting, showing actual days in referral and carried as a fixed decimal field |
| ZTDYS_UNIT | Unit - Populated by EIS for internal use |

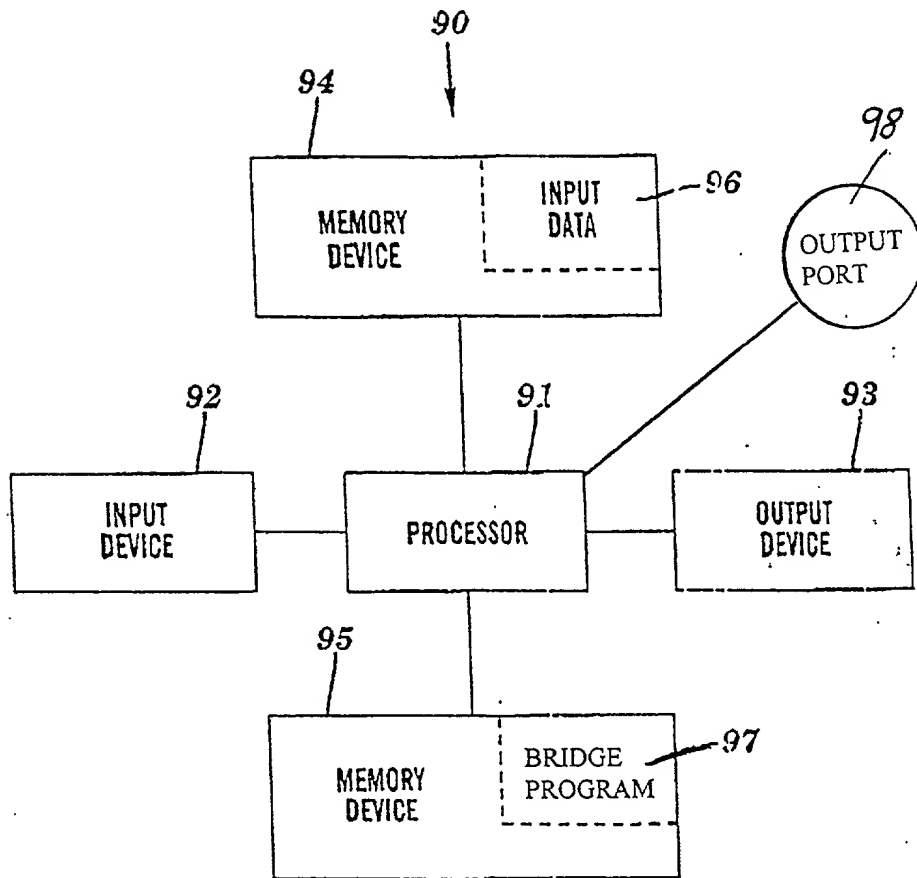


FIG. 8